When you complete this chapter, you will be able to:

- State the principles of design for the computer medium
- Develop a unified look for a Web site
- Understand the importance of active white space
- Focus your design on the user
- Evaluate Web sites using screen-oriented design principles

This chapter covers the basic design principles that you will apply as you work through this book. By examining a variety of Web sites, you will learn to focus on both the user's needs and the information requirements of the content you want to deliver, while planning a site that is easy to navigate and quick to download.

The sample Web pages in this chapter come from a wide range of sites. The Web is so far-reaching in content and design that no collection of pages represents what is typical. Most of the samples illustrate good design principles, although some highlight design defects as well. In truth, almost every site has one flaw or another—whether it be confusing accessibility, over-ambitious design, or poor download time. Judge the samples with a critical eye. Look for elements of design that you can transfer to your own work. As you progress through the book, you will practice and apply these principles to your own Web design efforts.

DESIGN FOR THE MEDIUM

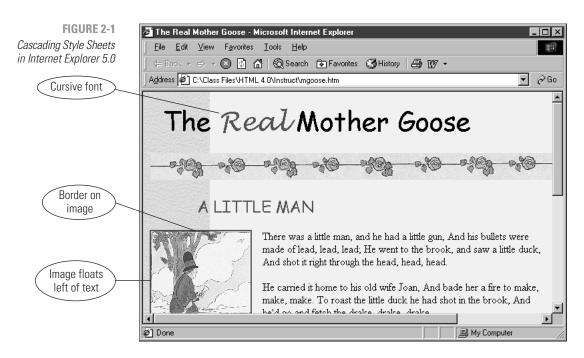
When designing a Web site, remember the destination is a computer, not the printed page, and the language is hypertext, not linear text. As a Web page designer, you must create Web pages specifically for the computer screen. You must consider the layout, fonts, and colors and how they will appear. As an HTML author, you must consider the nonlinear nature of hypertext, and weave the appropriate links and associations into the information. Give users the options to follow the information path they desire by providing appropriate links to related topics. Make them feel comfortable at your site by letting them know where they are and where they can go.

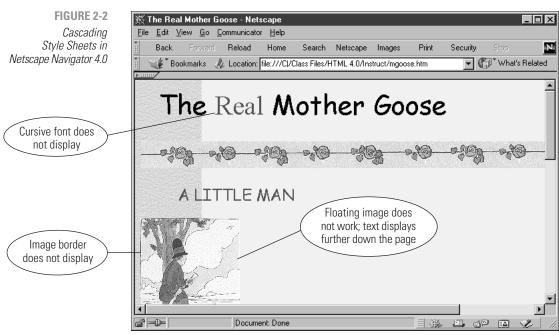
CRAFT THE LOOK AND FEEL

The interface that the user must navigate often is called the look and feel of a Web site. Users look and feel when they explore the information design of your site. They read text, make associations with links, view graphics, and, depending on the freedom of your design, create their own path through your information. The look and feel is both the way your Web site works and the personality it conveys to the user. Not only should you plan for a deliberate look and feel, but you must test your design against the variable nature of the Web. You want to ensure that the greatest number of users can navigate your site reliably.

MAKE YOUR DESIGN PORTABLE

To be successful, your Web site design must be portable and accessible across different browsers, operating systems, and computer platforms. Many designers make the mistake of testing in only one environment, assuming that their pages look the same to all of their users. No matter how much Web design experience you gain, always remember to test even when you feel confident of your results. Figures 2-1 and 2-2 show the same page displayed in Internet Explorer 5.0 and Netscape Navigator 4.0. The page is coded with standard Cascading Style Sheets code that Netscape cannot interpret, so the design does not appear as the designer intended.





You can avoid this problem by making your design portable. Viewing your pages in the browsers your users are likely to have, using popular operating systems, and checking the site on more than one computer platform ensure your site will be accessible to the greatest number of users.

DESIGN FOR LOW BANDWIDTH

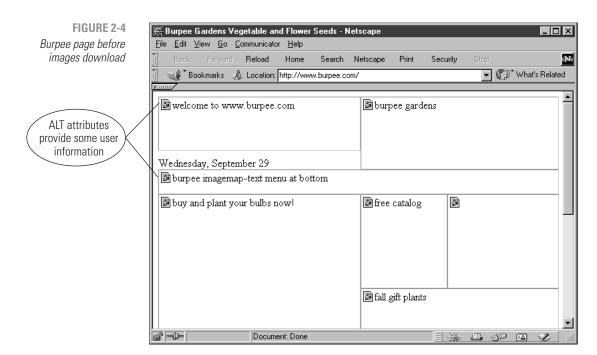
Plan your pages so that they are accessible at a variety of connection speeds. If your pages download slowly because they contain large, detailed graphics or complicated animations, your users will leave before they ever see your content. As you learned in Chapter 1, it will be a few more years before the majority of your users have a consistent, high-speed connection to the Web. Until that time, consider users with a lower bandwidth when you design the look and feel of your site.

The Burpee Web site main page, illustrated in Figure 2-3, contains seven separate images.

FIGURE 2-3 Burpee Web site main page



The images on this page total 103 Kb. Users who connect to the Web with a modem have a long wait before the images download. Figure 2-4 shows the Burpee page before the images have downloaded.



The designers have made an attempt to accommodate users who have slower connections by providing minimal navigation cues in the alternate text for the images. (You will learn more about alternate text in the discussion of ALT attributes in Chapter 4.) A better option would have been to design a page that is less graphics-intensive so it would download quickly for all users, rather than only for those with faster connections.

PLAN FOR CLEAR PRESENTATION AND EASY ACCESS TO YOUR INFORMATION

Your information design—the presentation and organization of your information—is the single most important factor in determining the success of your site. Your graphics and navigation options—the look and feel of your site—must present a variety of options to the user without detracting from their quest for information. A visitor to your site may choose to browse randomly or look for specific information. Often users arrive at a page looking for information included low in the hierarchy of information. Sometimes users arrive at your site seeking a specific piece of information, such as a telephone number or order form. Anticipate and plan for the actions and paths that users may choose when they traverse your site. Provide direct links to the areas of your site that you feel will be most in demand.

Present your information so it is easy to read. Many Web sites fail this criteria by using too many fonts, colors, and lengthy passages of text. The computer display is a poor reading medium. The low resolution degrades legibility. The light source coming from behind the text tires the eye. Think about providing

contrasting colors that are easy to read and easy on the eye, such as dark colors against a light or white background.

Break text into reasonable segments that make for easier on-screen reading. Keep in mind that readers have different habits when reading online. They scan more and read less, skimming long pages quickly as they scroll through the text. Include plenty of headings so users can find content quickly. Control the horizontal length of your text to provide complete, easy-to-read columns. Keep the seven plus or minus two rule of information design in mind; that is, users cannot comprehend more than seven plus or minus two steps or segments of information at one time. For example, a well-written procedure would contain no more than nine steps. Rather than presenting endlessly scrolling pages, break information into smaller chunks and link them with hypertext.

DESIGN THE WHOLE SITE

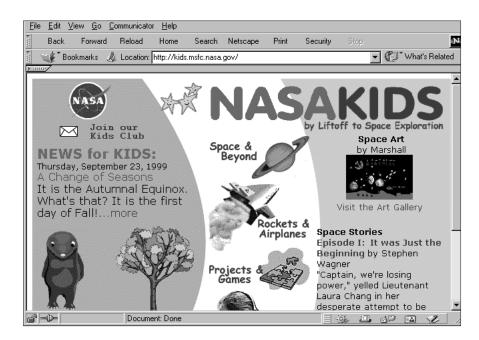
When designing your site, plan the unifying themes and structure that will hold the pages together. Your choices of colors, fonts, graphics, and page layout should communicate a visual theme to the user that orients them to your site's content. The theme should reflect the impression that you or your organization want to convey. For example, Figure 2-5 shows the NASA Web site main page. The text-based page presents a sober image, and indeed, the content provides serious scientific information.

FIGURE 2-5 NASA Web site main page



The use of subdued colors, familiar, business-oriented fonts, and structured, linear columns underscores the content and emphasizes the scientific theme. NASA also maintains a Web site for children, as illustrated in Figure 2-6.

FIGURE 2-6 NASA Web site for children



Where the site for adults communicates a serious impression, the site for children combines bright colors, an open, friendly font, a dynamic structure, and simple, appealing graphics to present a livelier, more playful theme.

When you design the whole site, you must consider more than each individual page. For a well-integrated site, create smooth transitions, use a grid to provide visual structure, and use active white space.

CREATE SMOOTH TRANSITIONS

Plan to create a unified look among the sections and pages of your site. Reinforce the identifying elements of the site and create smooth transitions from one page to another by repeating colors and fonts and by using a page layout that allows different hierarchical levels. Avoid random, jarring changes in your format, unless this is the effect you want to achieve. Consistency creates smooth transitions from one page to the next, reassures viewers that they are traveling within the boundaries of your site, and helps them find information.

Think of users turning the pages of a periodical when they browse from Web page to Web page. Although each page should be a complete entity, it also is a part of the whole site. The overall design of a page at any information level should reflect the identity of the site. For example, Figures 2-7 and 2-8 show the main page and a secondary level page from the United Parcel Service Web site.

FIGURE 2-7 UPS Web site main page



FIGURE 2-8 UPS Web site secondary page



These pages share the same color scheme, navigation icons, and identifying graphics, which create a smooth transition from the main page to the secondary page, and develop a unified look and feel for the Web site.

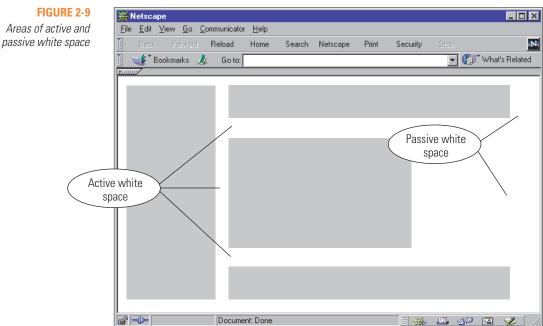
USE A GRID TO PROVIDE VISUAL STRUCTURE

The structure of a Web page is imposed by the grid or page template you choose for your page design. The grid is a conceptual layout device that organizes the page into columns and rows. You can impose a grid to provide visual consistency throughout your site. You can use the grid to enforce structure, but you also can break out of the grid to provide variety and highlight important information.

HTML authors use the HTML table elements to build the grid for their pages. Although originally designed for tabular data, the table elements were used by designers as a tool for building the type of columnar grid structure they were accustomed to using in traditional print media. Most well-designed sites use tables in one form or another to provide structure and consistency to their pages. With table borders turned off, the user cannot tell the layout is held together by a table. What they see is a coherent, well-structured page.

USE OF ACTIVE WHITE SPACE

White spaces are the blank areas of a page. Use white space deliberately in your design, rather than as an afterthought. Good use of white space guides the reader and defines the areas of your page. White space that is used deliberately is called active white space. Active white space is an integral part of your design that structures and separates content. Sometimes the strongest part of a design is the active white space. Passive white spaces are blank areas that border the screen or are the result of mismatched shapes. Figure 2-9 illustrates active versus passive space.



Areas of active and

Content presentation can become confused when designers do not use enough active white space to separate and define content. The America Online Web site illustrated in Figure 2-10 would be easier to scan if it used more active white space between the content areas.

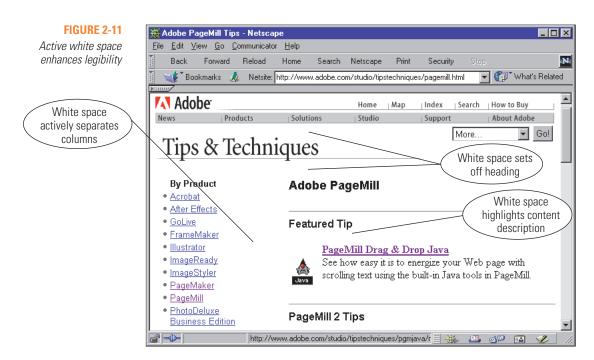
FIGURE 2-10 More white space would diminish the clutter

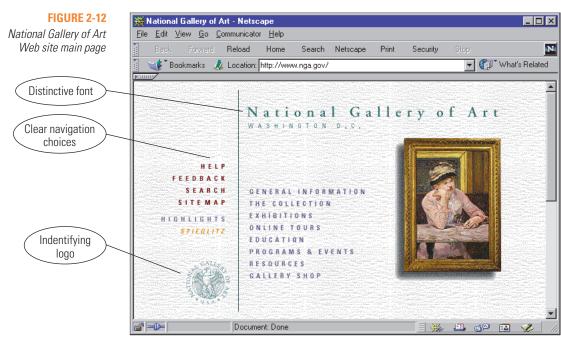


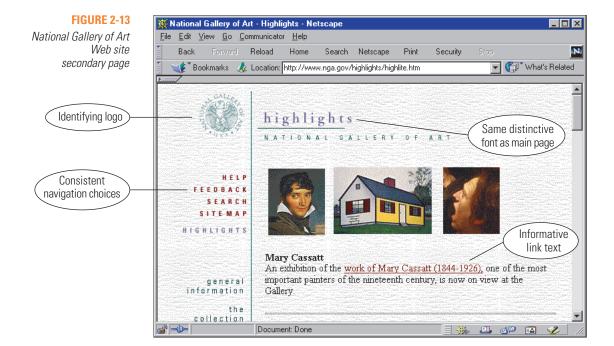
A lack of active white space creates the impression that a page contains too much information, and it is difficult to find the piece of information you want. In contrast, the Adobe Web page in Figure 2-11 has generous amounts of active white space, making it much easier to read. Plenty of active white space reduces clutter and clarifies the organization of your ideas.

Provide grounding for the user by placing navigation elements in the same position on each page. Users will orient themselves quickly to your navigation structure. Use the same navigation graphics throughout the site to provide consistency and reuse graphics stored in the cache.

Apply some of these principles to two mainstream Web sites. Figures 2-12 and 2-13, illustrating the National Gallery of Art (NGA) Web site, demonstrate a smooth transition between pages.







The main page and secondary page share a number of characteristics:

- Consistent background graphics
- Consistent placement of navigation information
- Vertical rule that provides structure
- Consistent font usage
- Logo that brands the site
- Generous areas of active white space

The continuity between these pages enforces the feeling of a whole piece of work. The understated fonts and colors and the quiet background graphics provide an appropriate museum-like impression. One design rule to note—the logo should remain in the same place on all pages for consistency. Users may otherwise look for reasons the logo has moved, which distracts them from your message.

The Adobe Web site, illustrated in Figures 2-14 and 2-15, has a much different look but still applies the same principles. Adobe is a creator of design software—their audience probably is sensitive to visual design. Because of this, their site must be visually appealing, adhere to graphic design rules, and present accessible information.



In these two pages from the site, the three-column layout packs in a lot of information without clutter. Note that the important, most current information

is presented in the center of the viewer's attention. Icons highlight the featured items in the right column. Consistent navigation choices and the company's identifying logo are at the top of the page, while the left column holds secondary-level links. The use of white space between the columns organizes the page and keeps it from looking confusing. Although both sites use a three-column layout, the Tips & Techniques header on the secondary page breaks across the two-column grid to vary the design.

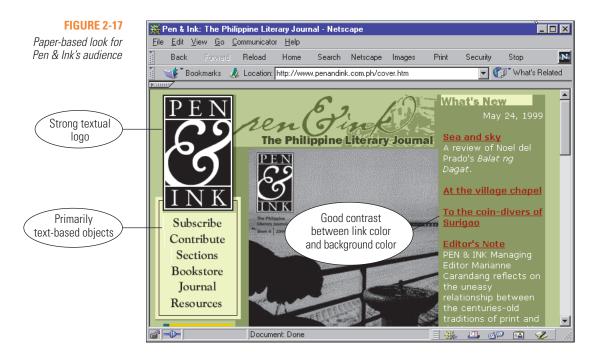
DESIGN FOR THE USER

Keep your design efforts centered solely around your user. Knowing your audience answers almost all design questions—if it serves the audience, keep it; if it is potentially distracting or annoying, eliminate it. Find out what users expect from your site. If you can, survey them with an online form. Create a profile of your average user by compiling responses to basic questions. What do users want when they get to your site? Are they trying to find customer support and troubleshooting help, or do they want to buy something? Do they want to read articles or search for information? Once you know what your users want from your site, you can evaluate how the design reflects the audience profile.

Compare the main pages from the following sites and consider their target audiences. E! online (Figure 2-16) is an entertainment news site. The four-column main page contains competing content that draws the user's eye, such as animations, a Java text scroll, bright colors, and familiar shapes. The overall effect is decidedly similar to television—familiar territory for E! online's audience.



Pen & Ink's Web site (Figure 2-17) projects a strong smell of printer's ink. Other than the black and white photo, the main page components are textual. The prominent logo features a text element—the ampersand. Strong contrasting colors highlight the links. The layout evokes quill pens and lead type, which is exactly what the literary-minded user would like in an online journal.



These two examples demonstrate how the design suits the audience's visual expectations, which is the look of the site. But you also should consider the ways in which users interact with the content, which is the feel of the site.

DESIGN FOR INTERACTION

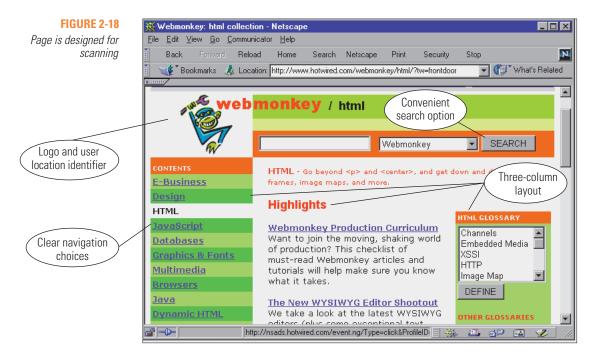
Think about how the user wants to interact with the information on your Web page. Design for your content type, and decide if the user will read or scan your pages.

For example, suppose your page is a collection of links, such as a main page or section page. Users want to interact with these types of pages by scanning the content, scrolling if necessary, pointing to graphics to see if they are hyperlinked, and clicking linked text. Design for this type of user interaction by using meaningful column headings, linked text, and short descriptions. Organize links into related topic groups and separate groupings with white space, graphics, or background color.

Suppose the page is an article that contains large blocks of text. Your user is accustomed to interacting with pages of text by scrolling and possibly clicking hyperlinked words of interest. The links may be in the body of the article

or contained in a sidebar. Design your pages for this type of content by keeping paragraphs short for online consumption. Make reading easier by using a text column that is narrower than the width of the screen. Keep your text legible by providing enough contrast between foreground and background colors. Provide links that allow the user to jump quickly to related content.

Two screens from the WebMonkey site illustrate the read/scan concept. Figure 2-18 shows a page designed for scanning. Users will look through a variety of links to find a topic of interest. Once they choose a link, they jump to a page designed for reading, as illustrated in Figure 2-19. Note in both pages the user location identifier. This simple path statement lets the user quickly see their place in the hierarchy of information.



DESIGN FOR LOCATION

It is difficult to predict the user's exact viewing path. There is, however, general agreement on the relative areas of screen importance. Figure 2-20 depicts the sections of screen real estate ranked in order of importance.

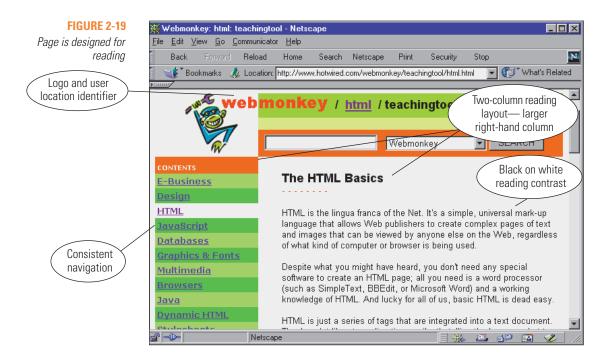
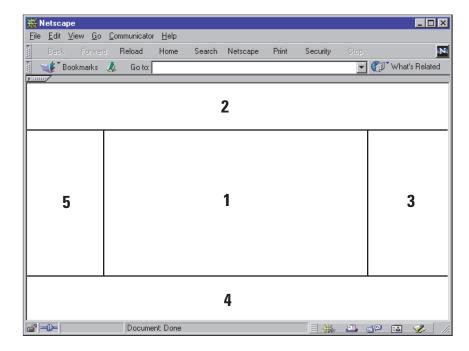


FIGURE 2-20

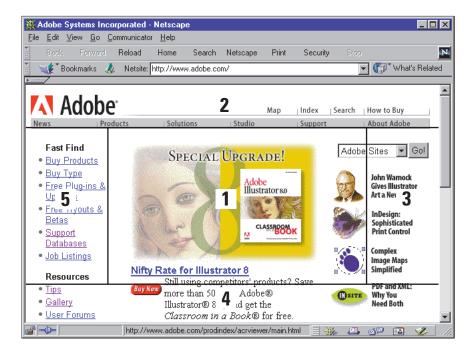
Relative areas of screen importance



During page design, rank the information you want to display, and then position the most important in the middle of the window, the next most important across the top, and so on, with the least important or static information in the left margin. For example, Figure 2-21 shows the Adobe main page with the areas of importance overlaying the content.

FIGURE 2-21

Areas of screen importance applied to Adobe Web site



Note that the most important and current information is displayed in area 1. The company logo and main navigation banner are displayed in area 2. Featured stories that change often are placed in area 3. Reading content is in area 4. Area 5 is used for links that appear consistently, but are of secondary importance. When planning your page layout, think location. The positioning of your content defines its importance to the user.

GUIDE THE USER'S EYE

The user can traverse a page in a variety of ways. Human engineering studies show a wide range of results when tracking user's eye movements. As you plan your design to guide the user's eye, consider the following two examples of online reading habits.

As a function of normal reading habits, the user's eye may move from left to right and back again, as in Figure 2-22.

Figure 2-23 shows this viewing pattern applied to the Pen & Ink Web site. Because this Web site is designed for users who are most comfortable with paper-based information, the page encourages a paper-based reading pattern.

FIGURE 2-22 Paper-based reading pattern

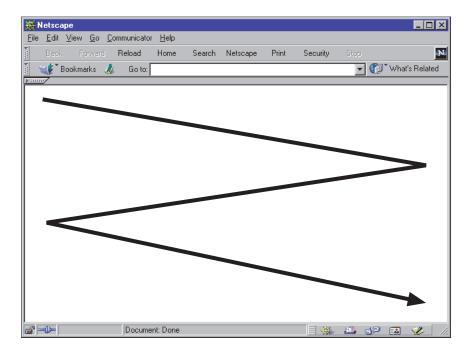
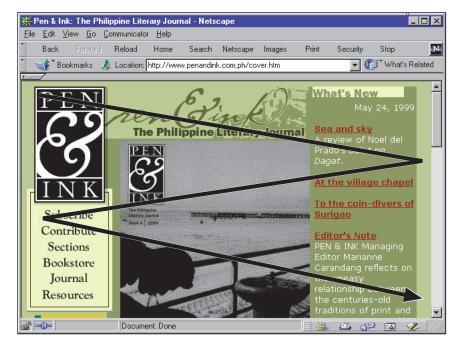


FIGURE 2-23
Using the paper-based reading pattern to view a Web site



In contrast, when viewing landscape-based displays, such as televisions, the user may scan information following a clockwise pattern, as shown in Figure 2-24.

FIGURE 2-24

Screen-based viewing pattern

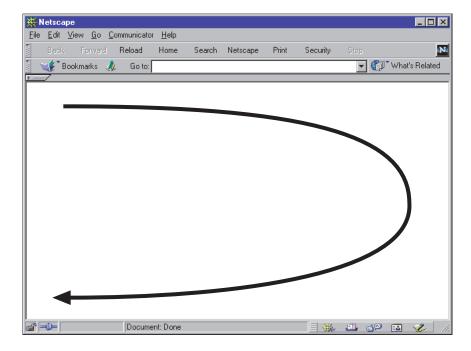


Figure 2-25 shows this viewing style overlaying the E! online Web site. As the user's eyes sweep over the page, they can take in most of the main content. Because this site is designed for users who are most accustomed to screen-based information, the page encourages a screen-based viewing pattern.

FIGURE 2-25

Using the screen-based viewing pattern to scan a Web site

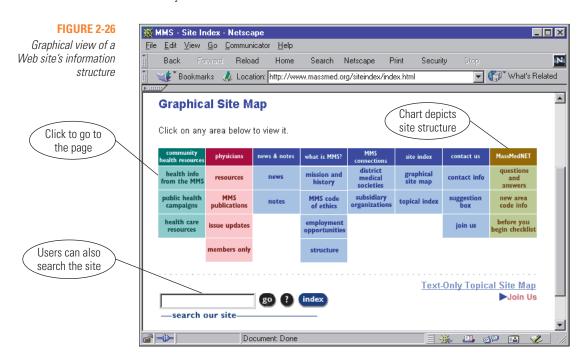


Knowing these common user habits can help you decide where to focus the user's attention by object placement, text weight, and color use. Think about your grid structure and how you want to break out of it to attract attention. Use text weight and size to communicate relative importance of information. Break sections up with rules or active white space. Use shapes and color to reinforce location or topic. Get to know your users, and consider the two sample viewing methods described above as you experiment with content placement based on the way these users will view the page.

KEEP A FLAT HIERARCHY

Do not make users navigate through too many layers of your Web site to find the information they want. Structure your Web site to include section or topic-level navigation pages so users quickly find their path. Provide prominent navigation cues that quickly take your user to the content they desire. For example, a standard navigation bar, consistently placed on every page, reassures users that they will not get lost, and lets them move through the site with flexibility.

Consider providing a site map that graphically displays a user's location in your Web site. Figure 2-26 shows a site map from the Massachusetts Medical Society Web site.

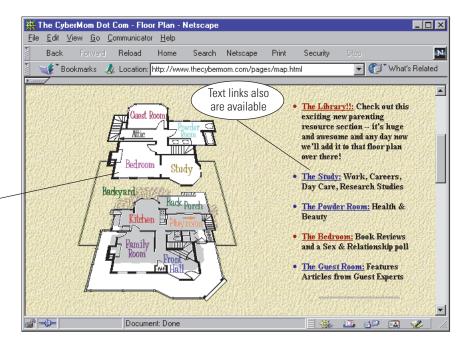


This graphical view of the Web site shows all the individual pages and the section in which they reside. It also provides a text box where users can enter keywords to find related information. Users can click to go directly to a page,

orient themselves to the site's content, or search the site. This is a good example of a graphical site map that fills more than one type of user need.

Figure 2-27 shows a clever site map from The Cybermom Dot Com Web site that reflects the target audience of the site. The site uses a house metaphor to organize content. The site map lets you click any room of the house to view that section of content. Text links provide brief descriptions and an alternate navigation method.

FIGURE 2-27
A visual metaphor for the site map



Click a room to go to the page

USE THE POWER OF HYPERTEXT LINKING

Unlike paper-based authors, as a hypertext author you have the luxury of adding clickable text and images where necessary to guide users through your information. This powerful ability comes with a measure of responsibility. You make the decisions that determine how users move through your site and process information. Readers browsing through magazines can flip to any page in any order they desire. You can replicate this nonlinear reading method on your Web site with links that let users move from page to page or section to section. With thoughtful hypertext writing, you can engage readers in a whole new way.

Many sites have separate columns of links and topics, but many do not provide links within the text. This is a powerful hypertext feature that is not used enough. Weave your links into your prose to offer a variety of paths. Avoid the Click here syndrome, illustrated in Figure 2-28, which is the habit of creating a link that consists of the meaningless Click here phrase, rather than providing a helpful textual clue to the destination of the link.

FIGURE 2-28
Click here syndrome

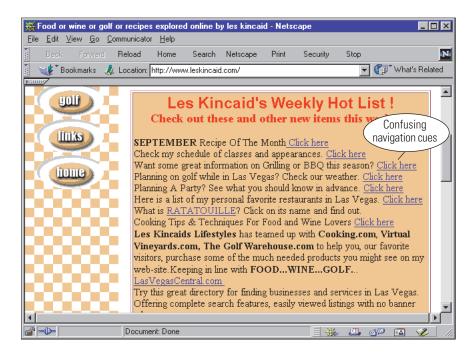
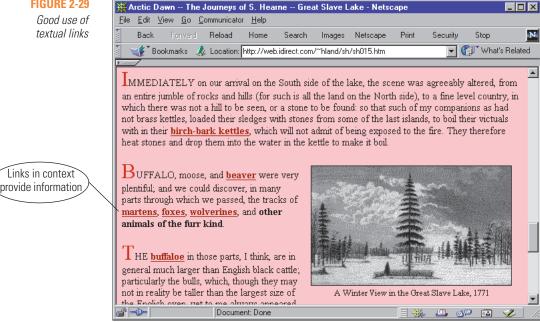


Figure 2-29 shows a page from *Arctic Dawn, The Journeys of Samuel Hearne.* This is an online hypertext version of an explorer's journal from the 1700s. Note how the hypertext links are worked directly into the text. When users click a link, they move to another page of information; from that page they either can go back or move to another page of information, and so on. The abundant hypertext links allow users to create a view of the site's information that is uniquely their own.

Provide plenty of links to let the user get around quickly. Use links to let the user return to the navigation section of your page, to a site map, or to the main page. Do not make the user scroll through lengthy columns. Provide links that let users jump down the page, jump back to the top of the page, or that show a clear way back to higher levels of your content.

FIGURE 2-29

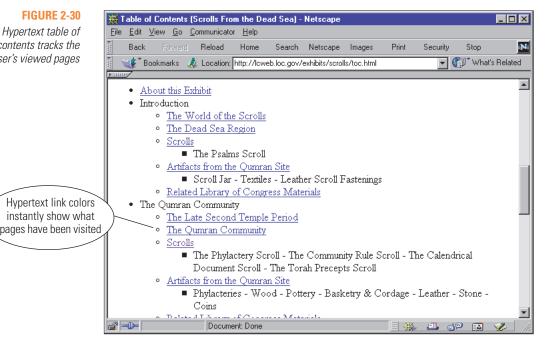
Good use of textual links



Provide a hypertext table of contents, as in Figure 2-30, that lets the users pick the exact topic they want to view.

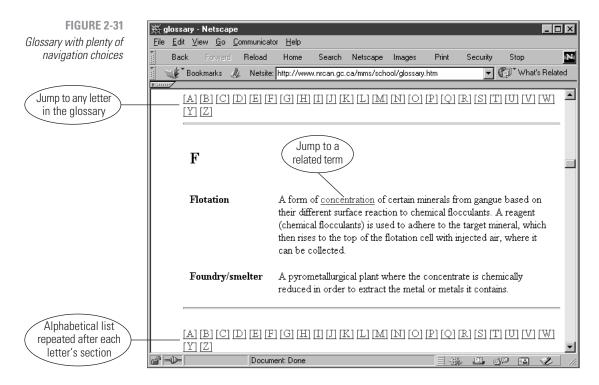
FIGURE 2-30

Hypertext table of contents tracks the user's viewed pages

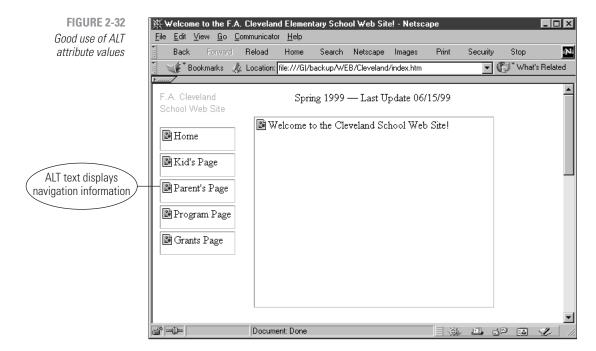


The benefit of a hypertext table of contents is the color-coding that shows the users which pages they have visited. By default, links are blue when new; they change to purple after they have been visited. A hypertext table of contents instantly shows the users where they have been and where they have yet to go.

Glossaries and other densely packed documents become much easier to navigate with the addition of hypertext. Figure 2-31 shows a hypertext glossary that provides plenty of navigation choices for the user.



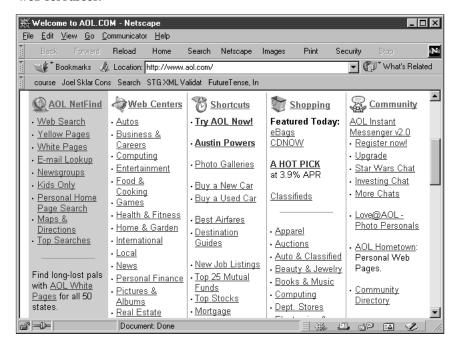
Provide alternate methods of linking to accommodate a variety of users. It is generally a sound idea to duplicate image links with text links in case users have their images turned off in the browser, use a text-based browser, or if images fail to download. Providing meaningful ALT attribute values in the tag also can provide the necessary navigation information if images do not display. (See Chapter 5 for more information about including ALT attribute values in the tag.) Figure 2-32 shows a Web page that has meaningful ALT values for every image. If the images do not appear, the user still can navigate the site.



HOW MUCH CONTENT IS ENOUGH?

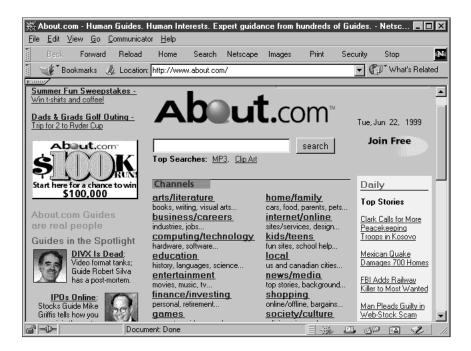
You only can crowd so much information onto any one Web page. Be conscious of the cognitive load of the user, who often thinks that Web pages hold too much information. America Online's Web site (Figure 2-33) offers a dizzying array of Web resources.





Designed as a scanning page, the user may spend a few seconds looking for a particular topic before moving on by selecting a link. Similarly, the About.com Web site (Figure 2-34) squeezes in a large amount of varied information in a small space.

FIGURE 2-34
So much content, so little time...



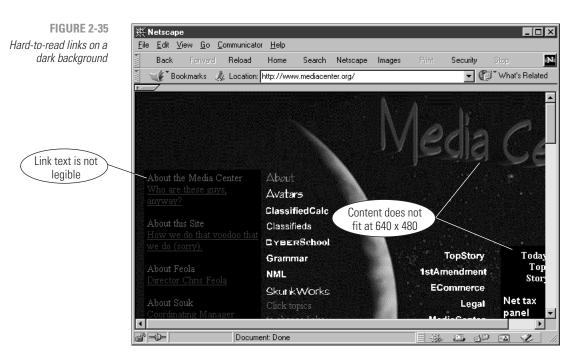
Resist the temptation to overload the user with too much information. Provide enough clues to let them find the content they want, and use links to divide content between pages.

DESIGN FOR THE SCREEN

The computer display, the destination for your Web pages, is very different from print-based media. You must take the following differences into account when planning your Web site:

- The shape of a computer screen. Although most paper-based media are portrait-oriented, the computer screen is landscape oriented—that is, wider than it is tall. Your page design must reflect the space within which it will be displayed and read.
- While a piece of paper reflects light, a computer screen has light passing through it from behind. This changes the nature of the colors and contrasts you choose to employ. Design pages that provide enough contrast for the user to read, but not so much that the colors distract from the content easily. Avoid light text on a light background and dark text on dark backgrounds. For example, the Media Center Web site, illustrated in Figure 2-35,

uses blue links on a black background, making the links illegible. Also, the content does not fit the browser at 640 x 480 resolution.



• Computer screens use a much lower resolution than the printed page. Graphics and text that would look fine on a laser printer at 600 dpi are coarse and grainy at 72 dpi, the typical resolution for a computer monitor. Because of the screen graininess, italic text is especially hard to read in paragraph format, as illustrated in Figure 2-36.

A SCREEN IS NOT A PAGE

Although tempting, it often is a poor choice to take documents that are formatted for print and post them online without considering the destination medium. In most cases, a document that is perfectly legible on paper is hard to negotiate online. The text length, font, and content length will not transfer successfully to the computer screen. Figures 2-37 and 2-38 show the same section of text from Lewis Carroll's *Alice in Wonderland*. Figure 2-37 is formatted as if it were a page from a book.

FIGURE 2-36 Blocks of italic text are hard to read

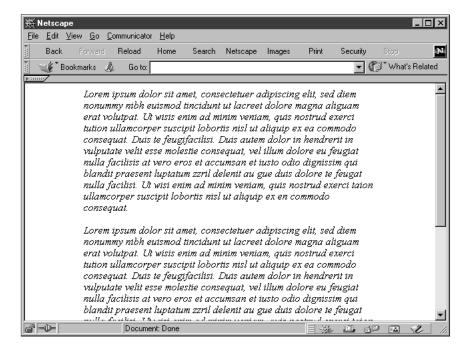
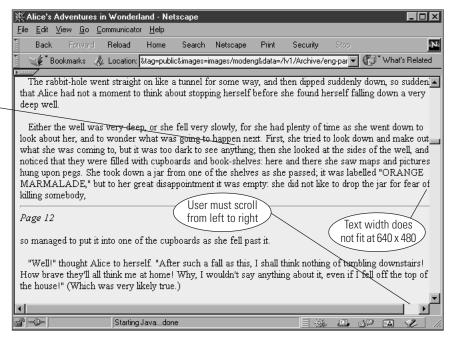
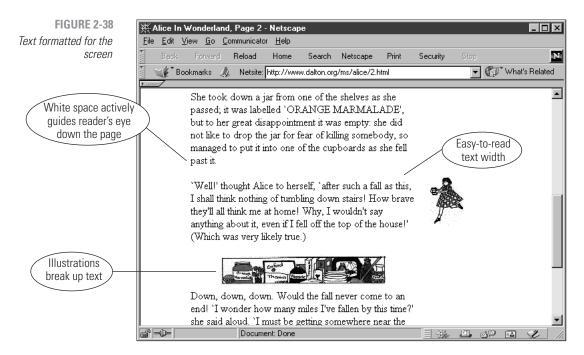


FIGURE 2-37 Text formatted for paper

Dense full-screen text



Note that the text is dense and fills the screen in large gray blocks. Because the text does not fit in the screen at 640 x 480 screen resolution, the user must scroll from left to right to read an entire line. In contrast, Figure 2-38 shows text that has been designed for online display.



The text width is short and easy to read without horizontal scrolling. The white space creates a text column that enforces the vertical flow of the page. The illustrations break up the text and relieve the user's eye. The differences between these two pages show that text must be prepared thoughtfully for online display.

SUMMARY & REVIEW

Web sites have a wide variety of looks. It is easy to see why so many Web designers get caught up in the medium and forget their message. The lure of technology makes it easy to forget that you still are trying to communicate with words and pictures, just as humans have for centuries. Adapting those elements to online display for effective communication is the challenge.

Plan a site that stands out and delivers its message. If you stick with the principles you learned in this chapter, you will be able to present information that is both accessible and engaging.

 Design specifically for the computer medium, considering how the page layout, fonts, and colors you use will appear on the screen.

- Craft an appropriate look and feel and stick with it throughout your site. Test and revise your interface by paying close attention to the demands of online display.
- Make your design portable by testing in a variety of browsers, operating systems, and computing platforms, and use as low a bandwidth as possible.
- Plan for easy access to your information. Provide logical navigation tools, and do
 not make the user click through more than two or three pages before they get what
 they want.
- Design a unified look for your site. Strive for smooth transitions from one page to the next. Create templates for your grid structure and apply them consistently.
- Use active white space as an integral part of your design. Use text, color, and object placement to guide the user's eye.
- Know your audience and design pages that suit their needs, interests, and viewing preferences.
- Leverage the power of hypertext linking. Provide enough links for the users to create their own path through your information.
- Design your text for online display, considering the differences between the screen and the page.

REVIEW QUESTIONS

- 1. What is another name for the interface the user must navigate in a Web site?
- 2. What is a common mistake Web designers make when testing their site?
- 3. What is a prime reason users may leave a Web site?
- 4. What is the single most important factor in determining the success of a Web site?
- 5. What important factor degrades the legibility of your information?
- 6. Name three ways to create a unified look for your site.
- 7. How does a grid layout enhance Web design?
- 8. Which HTML elements can you use to create a visual grid?
- 9. Explain active vs. passive white space.
- 10. List three ways to create a smooth transition between pages of a Web site.
- 11. List two benefits of consistently placing navigation tools.
- 12. Describe the difference between reading and scanning a page.
- 13. Name three ways to focus a user's attention.
- 14. Describe why using <u>Click here</u> as link text is ineffective.
- 15. Describe the benefits of textual linking.
- 16. Describe the benefits of a hypertext table of contents.
- 17. Why is the ALT attribute so important to navigation?
- 18. Name three differences between paper-based and screen-based design.
- 19. Describe a good strategy to format text for online display.

PROJECT

- Browse the Web for examples of good Web design.
 - Using a screen capture program, capture screens that show two levels of information from the Web site.
 - b. Indicate with screen callouts the unifying characteristics of the pages.
 - c. Indicate the areas of active white space and passive white space.
- 2. Browse the Web for examples of poor Web design.
 - Using a screen capture program, capture screens that show two levels of information from the Web site.
 - b. Indicate with screen callouts the jarring or distracting inconsistencies of the site.
 - c. Make recommendations for improving the site design.
- Write a short essay critiquing a Web site's design. Describe the structural layout of the site and determine whether information is presented clearly and is easily accessible.
- 4. Browse the Web for sites that use unique navigation methods. Write a short essay describing why the navigation is or is not successful.
- 5. Find a Web site that you think needs improvements in its design.
 - a. Print two pages from the site.
 - b. Make copies of the originals, and set the originals aside.
 - c. Using scissors, cut out the main elements of each page. Rearrange the elements and paste them in a design you feel improves the site.
 - d. Compare and contrast the original to your improved design.

CASE STUDY

Visualize the page design for your site by sketching a number of page layouts for different information levels of the site. For example, sketch the main page, a secondary page, and a content page. You do not have to be concerned with the exact look of the elements, but be prepared to indicate the main components of the pages, such as headings, navigation cues, link sets, text areas, and so on.

Start to organize your site. Create a visual diagram that indicates the main page, section pages, content pages, etc. Indicate the links between the pages. Indicate whether you will provide alternate navigation choices such as a table of contents and site map.